

# Users Manual



## LNA 5000 / Item.No.: 1041



### Description:

The **LNA 5000** is a broadband amplifier that is protected against destruction by electrostatic discharge with a amplitude limiter at the input. A modern MMIC on a low-loss ceramic microwave substrate enables a low noise figure and sufficient amplification over a bandwidth of over 5 GHz. With almost the same noise figure, the large signal behavior of the **LNA 5000** was significantly improved compared to the previous LNA 5000. The input IP values, which determine the large signal strength, have been improved by around 20 dB (!) compared to the previous version. This classifies the **LNA 5000** as an all-round amplifier for numerous applications, whether as a preamplifier for scanners, receivers or to improve the sensitivity of measurement systems. It can also be used as a small power amplifier with a PEP output of 160 mW @ 30 dB IMA 3. The amplifier may be fed directly via UHF socket or remotely via the coaxial cable and the remote powering coupler **DCC 5000 pro** (item.No. 1040).

### Assembly:

Mount the preamplifier directly to the mast with the included clamps. The N-sockets should point downwards. Connect the preamp input (socket „ANT“) via the shortest possible coaxial cable to your antenna. Please choose a low-loss coaxial cable only. We recommend our cables AIRCOM PREMIUM or ECOFLEX 10. Subsequently, connect the coaxial cable going to the receiver to the socket „TRX“. If you feed the preamp via the coaxial cable from antenna input of the RX, the mounting process is finished already. In case of direct feeding via the UHF socket it is absolutely necessary to use a shielded cable, f.e. Aircell 7. The inner conductor has to be connected to the Plus (+) pole, the shielding to the Minus (-) pole. This cable will be connected to the UHF socket of the preamp by a commonly used UHF-connector.

### Technical Data

Frequency range	50 - 5000 MHz
Amplification / Noise figure	@ 50 MHz 18/2.3 dB @145 MHz 16/2.0 dB @ 432 MHz 16/2.2 dB @1300 MHz 15/2.3 dB @ 2400 MHz 11/2.8 dB
Connection norm	N – socket
DC input	UHF - socket
Operating voltage	8 V – 14 V
Current consumption	Typ. 165 mA
Mast diameter	max. 58 mm

### Notes on environmental protection



Electrical and electronic devices may not be disposed of with household waste. This must be handed in separately at collecting points or returned to the point of sale. Packaging materials must be separated and disposed of through the municipal waste by material type.

### Maintenance

Do not open the unit. It does not contain any parts needing maintenance. If you need help regarding technical matters, please contact [support@ssb-electronic.com](mailto:support@ssb-electronic.com). For a lowest possible noise figure of the complete system set preamp to maximum gain.

### Safety, Warranty

Not suitable for children! The packaging material and the device may contain small parts which may be swallowed. Repairs may only be performed by qualified personnel. Opening the device or improper use will void any warranty claims. No guarantee will be given. The device applies to the Low Voltage Directive 2006/95/EG, as well as to 2004/108/EG, 2002/96/EG, 1999/44/EG.

### Declaration of Conformity



The CE mark is a free trade mark. It does not guarantee any product features. The product does apply all relevant regulations within the scope of 94/62/EG.

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